

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : A63F 3/06	A1	(11) International Publication Number: WO 90/14139 (43) International Publication Date: 29 November 1990 (29.11.90)
(21) International Application Number: PCT/GB90/00807 (22) International Filing Date: 23 May 1990 (23.05.90) (30) Priority data: 8912099.2 25 May 1989 (25.05.89) GB 8912100.8 25 May 1989 (25.05.89) GB (71) Applicant (for all designated States except US): BILGREY SAMSON & COMPANY LIMITED [GB/GB]; George House, George Road, Edgbaston, Birmingham B15 1PG (GB). (72) Inventor; and (75) Inventor/Applicant (for US only) : STANLEY, Wyatt, James [GB/GB]; The Coach House, Kenswick Manor, Lower Broadheath, Worcestershire (GB).		(74) Agent: LAURENCE, Shaw; George House, George Road, Edgbaston, Birmingham B15 1PG (GB). (81) Designated States: AT, AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH, CH (European patent), CM (OAPI patent), DE*, DE (European patent)*, DK, DK (European patent), ES, ES (European patent), FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), HU, IT (European patent), JP, KP, KR, LK, LU, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI pa- tent), MW, NL, NL (European patent), NO, RO, SD, SE, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US. Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: GAMES APPARATUS (57) Abstract Apparatus for use in playing a game of Bingo to minimise the risks of abuse or mistakes, comprises a plurality of peripheral units for use by players, each unit being arranged for communication with a central unit.		

DESIGNATIONS OF "DE"

Until further notice, any designation of "DE" in any international application whose international filing date is prior to October 3, 1990, shall have effect in the territory of the Federal Republic of Germany with the exception of the territory of the former German Democratic Republic.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	ES	Spain	MC	Monaco
AU	Australia	FI	Finland	MG	Madagascar
BB	Barbados	FR	France	ML	Mali
BE	Belgium	GA	Gabon	MR	Mauritania
BF	Burkina Faso	GB	United Kingdom	MW	Malawi
BG	Bulgaria	GR	Greece	NL	Netherlands
BJ	Benin	HU	Hungary	NO	Norway
BR	Brazil	IT	Italy	RO	Romania
CA	Canada	JP	Japan	SD	Sudan
CF	Central African Republic	KP	Democratic People's Republic of Korea	SE	Sweden
CG	Congo	KR	Republic of Korea	SN	Senegal
CH	Switzerland	LI	Liechtenstein	SU	Soviet Union
CM	Cameroon	LK	Sri Lanka	TD	Chad
DE	Germany, Federal Republic of	LU	Luxembourg	TC	Togo
DK	Denmark			US	United States of America

GAMES APPARATUS

The invention relates to games apparatus, and more particularly to apparatus for use with the game known as Bingo.

Bingo is a popular game of chance in which a plurality of players each purchase a matrix array having rows and columns of random numbers. A game controller or operator calls out numbers at random and the players mark off those numbers that have been called out which coincide with those on their array. The winner is the first player to mark off all the numbers of his/her array, or on a row of that array. The prizes can frequently be of a substantial size and there is a need to ensure that the risks of mistakes or abuse or fraud are minimised.

It is known with one type of such a game to provide a plurality of consoles at a site each adapted to play Bingo, for example in an amusement arcade or Bingo hall. Each console has an illuminated display showing an array of numbers resembling a Bingo card which may be activated for play by the insertion of a coin. In the known arrangements, the winner is rewarded with a prize which is given to him or her by an operator at the site.

Such an arrangement can lead to mistakes and even fraud by the operator who is required to carry around large sums of money.

According to a first aspect of the invention there is provided apparatus for use in playing a game of Bingo comprising a plurality of peripheral units, for use by players, said units being arranged for communication with a central unit.

In a preferred embodiment of the invention the peripheral units comprise a console for each player, each console having means for displaying an array of random numbers resembling a Bingo card, actuation means for actuating play on the console, the console including a store to contain a supply of coins and/or tokens; each console being arranged, when authorised, to pay out a prize of money or tokens and each console being connected to the central unit which is arranged to authorise the player's console to pay out the prize in the event of a win condition for a game played on that console.

In use, the game operator calls out numbers at random, and those numbers which coincide with those on each players console are marked off by the players. The called numbers are stored by the central unit, for example comprising a computer, by the operator who may key in the numbers on a keypad on the central unit as they are called and compared with the numbers on each player's

console. In this way the computer can check early that there is a genuine win and authorize the payment of a prize to a winner of a game without the operator having to handle coins or tokens, and the risk of mistakes or fraud are reduced.

There is another way of playing a game of Bingo at a Bingo or like hall in which a card having the array of random numbers is sold to each player. The game may then be played as described previously. A national game of Bingo is known in which a number of Bingo halls simultaneously play the same game of Bingo. The national Bingo organizer issues cards or books of cards each bearing a serial number or identifying code to the management of individual separate Bingo halls, who then sell them to the players.

Before the game is to be played the operator at each Bingo hall telephones the national organizers to tell them the volume of cards sold and the serial numbers of the cards. This is to prevent fraud. When the game is played the caller at each Bingo hall calls out numbers at random and these are marked off the cards by the players. The first player to mark off all his numbers at each local individual hall will then win a prize. The operator of each hall then telephones the national organizer to tell them the winning serial number and the total number of calls made before a win was achieved, e.g the caller called out, say,

thirty numbers for the winner to be able to mark off all, say, seven numbers on his card. This information is then entered into the national game and the winner of that game is the player who has completed his card with the fewest numbers called. In this way two separate games can be played at the same time. Because one of the games is national the prize money offered to the winner of that game can be substantial.

For this system to work all the operators at the participating Bingo halls must telephone the national organizer with the volume of cards sold together with the respective serial numbers. This can take a long time and tie up telephone lines; frequently not all participating halls can get through in time which means that although players have paid to enter the national game, they are, in fact, not entered.

In a second preferred embodiment of the invention, the peripheral units comprise a plurality of dispensers to dispense Bingo cards and the like to be located in each of a plurality of Bingo halls or like sites, each dispenser containing a supply of Bingo cards and arranged to dispense a Bingo card in exchange for money or moneysworth, each dispenser being connectable to the central unit and arranged, when required, to send information to the central unit about the quantity and type of cards dispensed prior to the commencement of a single Bingo game played commonly within all of

the plurality of Bingo halls.

The cards may be pre-encoded, or the dispenser may include means for printing a serial number on each card as it is dispensed.

In order that the invention may be better understood, embodiments will now be described, by way of example only, with reference to the accompanying diagrammatic drawings, in which:

Figure 1 shows one embodiment of apparatus according to the invention.

Figure 2 shows schematically another embodiment of apparatus according to another aspect of the invention; and

Figure 3 shows a Bingo card for use in playing the embodiment of the invention shown in Figure 2.

As shown in Figure 1 a plurality of peripheral units in the form of consoles 1, three are shown, are located at an amusement arcade or Bingo hall. Each console 1 includes an illuminated display of a matrix array of random numbers 2 resembling a Bingo card. An entrance slot 3 is present in the console 1 whereby coins or tokens can be put in the console to actuate it for play. Each console 1 is connected to a central unit in the form of a

master console 4 including a computer. The master console 4 may also include a numerical key pad or the like so that the game operator can input the called numbers into the computers memory. Alternatively, the computer may generate the numbers randomly and store them automatically. Each console also includes an outlet slot 5 for the payment of change, or of a prize in the form of coins or tokens. The tokens used may be of any known type, but are preferably in the form of a rectangular planar card of a similar size to a credit card, and having a magnetized coded or laser readable coded stripe or the like present. In such a case the console 1 may include a card reader mechanism adapted to read the code on the magnetic strip and accept the card, it is identified as being acceptable or reject it, if it is unauthorized for that console. In such a case the console 1 may also include a token store containing a stack of tokens and a mechanism adapted to dispense one or more tokens in the event of a win, and to stack tokens put into the apparatus.

In use, each player inserts a coin or token into a console 1 to activate it for play and the matrix array 2 is illuminated. A caller or operator adjacent the master console 4 calls out numbers at random and stores the called numbers in the memory of the computer. The players mark off or cover with sliding doors the numbers that have been called out. When one of the players finds that he has covered all the numbers on his display 2 that

fact will also be stored on the computer at the master console 4 which can authorise the players console 1 to pay out tokens or cash, as required, from the outlet slot.

Figure 2 shows schematically apparatus for use in another type of game of Bingo, and again adapted to reduce or minimise the risks of fraud.

A system according to a second aspect of the invention comprises a plurality of peripheral units in the form of card dispensers 10, three are shown, which are each located at a separate Bingo hall. Each dispenser is arranged to dispense Bingo cards or books of cards (11) in exchange for money. As each card is dispensed, the apparatus is arranged to stamp or print on the card an identifying code or serial number 12. The serial number (12) will show that the card was issued for a particular national game in order to prevent fraud by preventing a person hoarding large number of cards and choosing a card to match the called numbers.

Each dispenser 10 is connectable to a central unit in the form of a computer 13, e.g via a modem connected through the telephone network. Each dispenser 10 may be arranged to send the numbers of the cards 11 in digital form as they are sold, or the information may be stored on magnetic tape or like memory means

and sent to the computer 13 in a batch prior to the commencement of the game. Because the numbers of the cards sold are transmitted automatically to the central computer it is easy for all the numbers from each of the dispensers to be transmitted before the commencement of the game and in this way all players are ensured of a chance of winning the national game. Each dispenser may also be used for the sale of ordinary Bingo tickets at the individual halls and there may be several dispensers at each site, which ensures that the players can purchase cards speedily and without having to queue up for long periods in front of a cash desk.

CLAIMS

1. Apparatus for use in playing a game of Bingo, comprising a plurality of peripheral units, for use by players, said units being arranged for communication with a central unit.
2. Apparatus as claimed in Claim 1, characterised in that the peripheral units comprise a console (1) for each player, each console having means for displaying an array of random numbers (2) resembling a Bingo card, actuation means (3) for actuating play on the console, the console (1) including a store to contain a supply of money and/or tokens; each console being arranged, when authorised, to pay out a prize of money or tokens and each console (1) being connected to the central unit (4) which is arranged to authorise the player's console (1) to pay out the prize in the event of a win condition for a game played on that console.
3. Apparatus as claimed in Claim 1 characterised in that the peripheral units comprise a plurality of dispensers (10) to dispense Bingo cards and the like to be located in each of a plurality of Bingo halls or like sites, each dispenser containing a supply of Bingo cards (11) and arranged to dispense a Bingo card in exchange for money or moneysworth, each dispenser being

connectable to the central unit (13) and arranged when required, to send information to the central unit (13) about the quantity and type of cards dispensed prior to the commencement of a single Bingo game played commonly within all of the plurality of Bingo halls.

4. Apparatus according to Claim 3 characterised in that the cards (11) are pre-encoded.

5. Apparatus according to Claim 3 characterised in that the dispenser includes printing means to print a serial number (12) on each card as it is dispensed.

6. Apparatus according to any of Claims 3 to 5, characterised in that each dispenser is connectable to the central unit (13) through a modem connected to the telephone network.

7. Apparatus according to Claim 6 characterised in that the information relating to the Bingo cards sold is temporarily stored on a storage means such as magnetic tape, disc or the like and is sent to the central computer (13) in a batch.

connectable to the central unit (13) and arranged when required, to send information to the central unit (13) about the quantity and type of cards dispensed prior to the commencement of a single Bingo game played commonly within all of the plurality of Bingo halls.

4. Apparatus according to Claim 3 characterised in that the cards (11) are pre-encoded.

5. Apparatus according to Claim 3 characterised in that the dispenser includes printing means to print a serial number (12) on each card as it is dispensed.

6. Apparatus according to any of Claims 3 to 5, characterised in that each dispenser is connectable to the central unit (13) through a modem connected to the telephone network.

7. Apparatus according to Claim 6 characterised in that the information relating to the Bingo cards sold is temporarily stored on a storage means such as magnetic tape, disc or the like and is sent to the central computer (13) in a batch.

FIG. 1

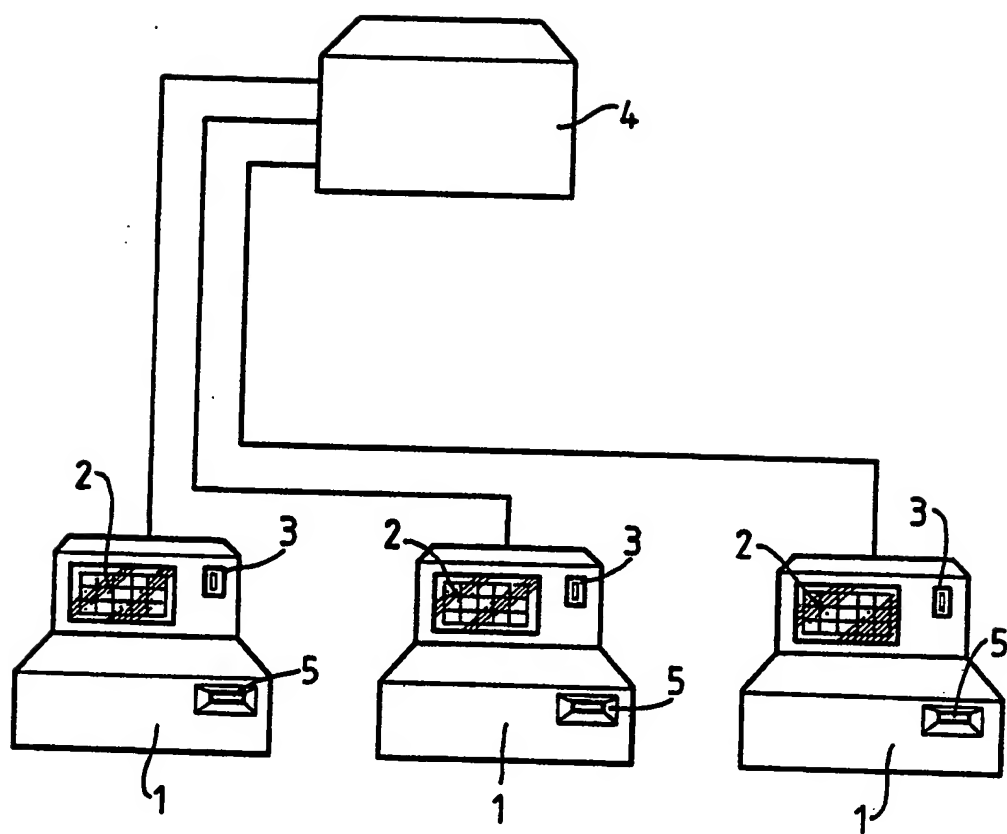


FIG. 2

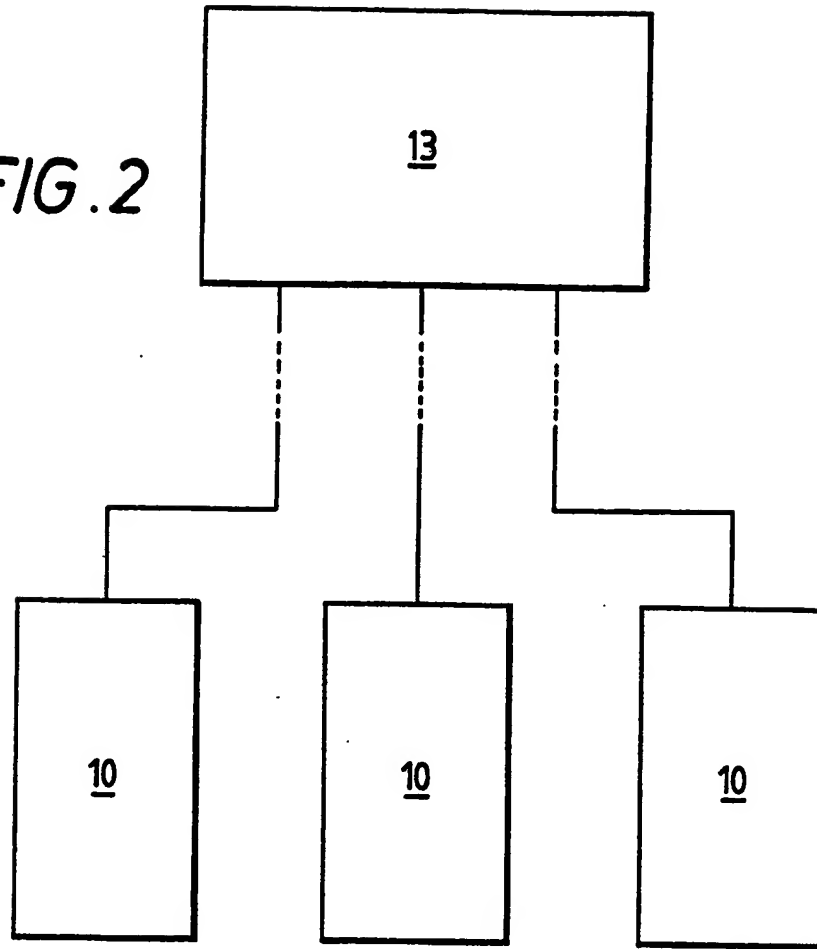


FIG. 3

1		7	81	65		38
98	5		67		62	
		41		29		17
	2					
31		25		98		26
	17		41		28	
LEI SURECARD				0122375		

FIG. 3 is a representation of a card (11) containing a 6x7 grid of numbers. The card has a label (12) at the bottom left reading "LEI SURECARD" and a number "0122375" at the bottom right.

INTERNATIONAL SEARCH REPORT

International Application No **PCT/GB 90/00807**

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) ⁶ According to International Patent Classification (IPC) or to both National Classification and IPC IPC⁵: A 63 F 3/06																							
II. FIELDS SEARCHED <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black; margin: 5px 0;">Minimum Documentation Searched ⁷</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%; text-align: left; border-bottom: 1px solid black;">Classification System</th> <th style="width: 75%; text-align: left; border-bottom: 1px solid black;">Classification Symbols</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">IPC⁵</td> <td style="padding: 5px;">A 63 F</td> </tr> </table> <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black; margin: 5px 0;">Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸</div>			Classification System	Classification Symbols	IPC⁵	A 63 F																	
Classification System	Classification Symbols																						
IPC⁵	A 63 F																						
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹ <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%; text-align: left; border-bottom: 1px solid black;">Category ⁹</th> <th style="width: 70%; text-align: left; border-bottom: 1px solid black;">Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²</th> <th style="width: 20%; text-align: left; border-bottom: 1px solid black;">Relevant to Claim No. ¹³</th> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">X</td> <td style="border-right: 1px solid black; padding: 5px;">US, A, 4747600 (RICHARDSON) 31 May 1988 see column 6, lines 10-17; lines 48-50</td> <td style="text-align: center; vertical-align: top; padding: 5px;">1</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">Y</td> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">--</td> <td style="text-align: center; vertical-align: top; padding: 5px;">2-7</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">X</td> <td style="border-right: 1px solid black; padding: 5px;">GB, A, 2180460 (DE PAULA MARTINEZ LOPEZ) 1 April 1987 see page 1, lines 110-120; page 2, lines 36-41</td> <td style="text-align: center; vertical-align: top; padding: 5px;">1</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">Y</td> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">--</td> <td style="text-align: center; vertical-align: top; padding: 5px;">2-7</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">A</td> <td style="border-right: 1px solid black; padding: 5px;">GB, A, 2128468 (HOARE) 2 May 1984 see page 2, lines 121-123</td> <td style="text-align: center; vertical-align: top; padding: 5px;">2</td> </tr> <tr> <td style="border-right: 1px solid black; text-align: center; vertical-align: top; padding: 5px;">A</td> <td style="border-right: 1px solid black; padding: 5px;">US, A, 4582324 (KOZA et al.) 15 April 1986 see column 4, lines 27-35</td> <td style="text-align: center; vertical-align: top; padding: 5px;">3</td> </tr> </table>			Category ⁹	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³	X	US, A, 4747600 (RICHARDSON) 31 May 1988 see column 6, lines 10-17; lines 48-50	1	Y	--	2-7	X	GB, A, 2180460 (DE PAULA MARTINEZ LOPEZ) 1 April 1987 see page 1, lines 110-120; page 2, lines 36-41	1	Y	--	2-7	A	GB, A, 2128468 (HOARE) 2 May 1984 see page 2, lines 121-123	2	A	US, A, 4582324 (KOZA et al.) 15 April 1986 see column 4, lines 27-35	3
Category ⁹	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³																					
X	US, A, 4747600 (RICHARDSON) 31 May 1988 see column 6, lines 10-17; lines 48-50	1																					
Y	--	2-7																					
X	GB, A, 2180460 (DE PAULA MARTINEZ LOPEZ) 1 April 1987 see page 1, lines 110-120; page 2, lines 36-41	1																					
Y	--	2-7																					
A	GB, A, 2128468 (HOARE) 2 May 1984 see page 2, lines 121-123	2																					
A	US, A, 4582324 (KOZA et al.) 15 April 1986 see column 4, lines 27-35	3																					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>¹⁰ Special categories of cited documents: ¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p> </div> </div>																							
IV. CERTIFICATION <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; padding: 5px;">Date of the Actual Completion of the International Search</td> <td style="width: 50%; border-bottom: 1px solid black; padding: 5px;">Date of Mailing of this International Search Report</td> </tr> <tr> <td style="text-align: center; padding: 5px;">12th October 1990</td> <td style="text-align: center; padding: 5px;">- 5. 11. 90</td> </tr> <tr> <td style="border-bottom: 1px solid black; padding: 5px;">International Searching Authority</td> <td style="border-bottom: 1px solid black; padding: 5px;">Signature of Authorized Officer</td> </tr> <tr> <td style="text-align: center; padding: 5px;">EUROPEAN PATENT OFFICE</td> <td style="text-align: center; padding: 5px;"> <div style="display: flex; align-items: center; justify-content: center;"> <div style="font-family: cursive; font-size: 1.2em; margin-right: 10px;">M. Peis</div> <div style="border: 1px solid black; padding: 2px 5px; font-weight: bold;">M. PEIS</div> </div> </td> </tr> </table>			Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	12th October 1990	- 5. 11. 90	International Searching Authority	Signature of Authorized Officer	EUROPEAN PATENT OFFICE	<div style="display: flex; align-items: center; justify-content: center;"> <div style="font-family: cursive; font-size: 1.2em; margin-right: 10px;">M. Peis</div> <div style="border: 1px solid black; padding: 2px 5px; font-weight: bold;">M. PEIS</div> </div>													
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report																						
12th October 1990	- 5. 11. 90																						
International Searching Authority	Signature of Authorized Officer																						
EUROPEAN PATENT OFFICE	<div style="display: flex; align-items: center; justify-content: center;"> <div style="font-family: cursive; font-size: 1.2em; margin-right: 10px;">M. Peis</div> <div style="border: 1px solid black; padding: 2px 5px; font-weight: bold;">M. PEIS</div> </div>																						

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category *	Citation of Document, " with indication, where appropriate, of the relevant passages	Relevant to Claim No.
A	GB, A, 2192342 (BELLARS et al.) 13 January 1988 see page 2, lines 120-123 --	6
A	GB, A, 2197971 (ROBINSON) 2 June 1988 -----	

**ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.**

GB 9000807

SA 37276

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 23/10/90. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4747600	31-05-88	None	
GB-A- 2180460	01-04-87	None	
GB-A- 2128468	02-05-84	None	
US-A- 4582324	15-04-86	None	
GB-A- 2192342	13-01-88	WO-A- 8906405	13-07-89
GB-A- 2197971	02-06-88	None	